

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 3 of 8

---

Patent No. 5,593,545 to Rugowski *et al.* In response, Claims 18 and 22 have been amended. However, the Applicant respectfully traverses the rejection of Claim 39.

The Williams '889 patent discloses a paper machine having a drying drum 5 over which a paper web 1 is fed, whereafter, the web 1 is removed from the drum 5 by a doctor blade 6. The web 1 is then directed over an open draw (FIG. 1) to either an upper winding mechanism 7 or a lower winding mechanism 8, each winding mechanism comprising an endless belt and a supporting conveyor. Each of the winding mechanisms 7, 8 functions to build up a multiple-ply web, the multiple-ply webs then being individually fed through a slitter device 20. After the respective web passes through the slitters 20, it is directed to a reeling mechanism 21 having a conveyor formed by a belt 73 and rollers 74 and 75, one roller 74 being driven by a shaft 66 via a belt 76. The conveyor then supports and transports the web to the reeling mechanism 21, as shown in FIG. 4.

The Lin '273 patent discloses a winding method in which a tissue sheet 15 is carried on a throughdrying fabric 11 and dried in a through-dryer 13, whereafter the uncreped throughdried sheet 15 is transferred to a first dry end transfer fabric 16 and then to a transfer belt 18 which traverses an unsupported span between two winding drums 21, 22. The uncreped sheet 15 is then transferred from the transfer belt 18 to the parent roll 25 on a reel spool 26 as the parent roll 25 is urged against the transfer belt 18 at a point within the unsupported span.

In contrast to the Williams '889 and Lin '273 patents, Claim 18 of the present invention, as amended, is directed to a dry end of a papermaking machine having a Yankee dryer for drying a paper web and having a rotatably driven reel spool for winding the paper web creped from the Yankee dryer thereon. The reel spool is located downstream of and proximate to the dryer. A winding support belt is stretched between at least a pair of spaced-apart guide rolls and forms a nip with the paper roll for supporting the reel spool and a paper roll wound thereon. Neither the Williams '889 nor the Lin '273 patent discloses a dry end of a papermaking machine having a Yankee dryer, whereby the reel spool is located downstream of and proximate to the dryer, and whereby a support belt forms a nip with and supports the reel spool and a paper roll wound

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 4 of 8

thereon, as now claimed in Claim 18. Accordingly, the Applicant submits that Claim 18, as amended, is not anticipated by either of the Williams '889 and Lin '273 patents.

The Rugowski '545 patent discloses a method for making an uncreped throughdried tissue product without an open draw. In one method, the web 15 is transported by a throughdrying fabric 11 over a throughdryer 13. The web 15 is then transferred to a first dry end transfer fabric 16 and, subsequently, to a second dry end transfer fabric 18. The second dry end transfer fabric 18 passes through a nip formed between a reel drum 22 and the reel 23, where the web 15 is separated from the fabric 18 and wound into a roll 25. In another method, the web 15 is transferred from the throughdrying fabric 11 to one or more reel drums 22, 26, with one of the reel drums 22 forming a nip with the reel 23, whereafter the web 15 is wound into a roll 25 on the reel 23.

In contrast to the Lin '273 and Rugowski '545 patents, Claim 22 of the present invention, as amended, is directed to an apparatus for a dry end of a papermaking machine having a Yankee dryer for drying a paper web and includes a rotatably driven reel spool, located downstream of and proximate to the dryer, for winding the paper web creped from the Yankee dryer thereon. A belt runs in a loop about a plurality of guide rolls, wherein a first of the guide rolls is positioned proximate the dryer and spaced upstream of a growing paper roll wound on the reel spool, and a second of the guide rolls is positioned adjacent the paper roll such that a portion of the loop of the belt between the first and second guide rolls extends from a location proximate the dryer to the paper roll and stabilizes the paper web as the paper web travels from the dryer to the paper roll. Neither the Lin '273 nor the Rugowski '545 patent discloses an apparatus for a dry end of a papermaking machine having a Yankee dryer, wherein the paper web creped therefrom is stabilized by a portion of a loop of a belt, extending from proximate to the dryer to a paper roll, as the paper web is wound on the reel spool located downstream of and proximate to the dryer, as now claimed in Claim 22. Accordingly, the Applicant submits that Claim 22, as amended, is not anticipated by either of the Lin '273 and Rugowski '545 patents.

In addition, in contrast to the Rugowski '545 patent, Claim 39 of the present invention is directed to a paper machine, comprising a forming section for forming a wet paper web and a

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 5 of 8

---

drying section for drying the wet paper web. The drying section includes at least one through-air dryer (TAD) comprising a foraminous dryer roll and a TAD fabric arranged in an endless loop about guide rolls such that the TAD fabric passes about the dryer roll, wherein the TAD fabric is arranged to receive the wet paper web and to carry the web about the dryer roll. A reel-up is located after the through-air dryer for winding the paper web onto a rotating reel spool, wherein the TAD fabric downstream of the dryer roll forms a nip with the reel spool such that the paper web carried by the TAD fabric passes through the nip and winds onto the reel spool to form a paper roll. FIGS. 4 and 5 of the Rugowski '545 patent, as cited in the Office Action, do not disclose a paper machine having a TAD fabric forming a nip with a reel spool, as claimed in Claim 39. Instead, FIGS. 4 and 5 of the Rugowski '545 patent show the web being transferred from the throughdrying fabric to one or more reel drums, wherein one of the reel drums forms a nip with the reel, before the web is wound into a roll on the reel. Accordingly, the Applicant submits that Claim 39 is not anticipated by the Rugowski '545 patent.

Accordingly, the Williams '889 and Lin '273 patents do not disclose a dry end of a papermaking machine having a Yankee dryer, whereby the reel spool for winding the creped web is located downstream of and proximate to the dryer, as now claimed in amended Claim 18. Further, the Lin '273 and Rugowski '545 patents do not disclose a belt having a portion of the loop extending from proximate to a Yankee dryer to a reel spool such that the portion of the loop stabilizes the paper web creped from the Yankee dryer as the paper web is wound onto the reel spool located downstream of and proximate to the dryer, as now claimed in amended Claim 22. In addition, the Rugowski '545 patent does not disclose a paper machine having a TAD fabric forming a nip with a reel spool, as claimed in Claim 39. Thus, the Applicant submits that embodiments of the present invention, as defined by Claims 18-23 and 39-40, are not anticipated by the Williams '889, Lin '273, and Rugowski '545 patents.

#### Claim Rejections – 35 U.S.C. § 103

Claim 22 was rejected in the Office Action as being unpatentable over the Williams '889 patent. In response, Claim 22 has been amended and, as previously discussed, is not anticipated

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 6 of 8

---

by the Williams '889 patent. The Applicant further submits that the Williams '889 patent does not teach, suggest, or provide motivation for the embodiments of the present invention claimed by Claim 22, as amended.

More particularly, the Williams '889 patent is directed to a paper machine for building up thin tissue into multiple-ply webs (Page 1, lines 4-6) whereby duplicate winders are arranged in parallel and adapted to act alternatively to take the tissue web from a single source of supply and to deliver the resultant multiple-ply webs to a single slitting and reeling mechanism, so as to avoid duplication of the slitting and reeling mechanism (page 1, lines 12-20). The Williams '889 patent further describes a process in which a multiple-ply web is built to a desired thickness by one winding mechanism from the web removed from the drying drum. The web is then torn off near the drum and inserted into the other winding mechanism to build another multiple-ply web. Each of the multiple-ply webs, in turn, is directed through the slitters and then to the reeling mechanism such that one slitting and reeling mechanism serves two winding mechanisms (page 2, lines 1-29). Accordingly, the Williams '889 patent does not teach, suggest, or provide motivation for an apparatus for a dry end of a papermaking machine having a Yankee dryer, wherein the paper web creped from the dryer is stabilized by a portion of a loop of a belt, extending from proximate to the dryer to a paper roll, as the paper web is wound on the reel spool located downstream of and proximate to the dryer, as now claimed in Claim 22. As such, Claim 22, as amended, defines patentable subject matter over the Williams '889 patent.

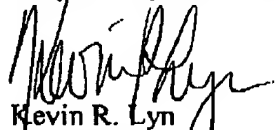
In summary, none of the Williams '889, Lin '273, and Rugowski '545 patents, either separately or in combination, teach, suggest, or provide motivation for the embodiments of the present invention as now claimed. Accordingly, in view of these differences between the Applicant's invention and the Williams '889, Lin '273, and Rugowski '545 patents, it is submitted that embodiments of the present invention, as defined by Claims 18-23 and 39-40, are patentable over the Williams '889, Lin '273, and Rugowski '545 patents cited in the Office Action. As such, Claims 18-23 and 39-40 are believed to be in condition for immediate allowance.

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 7 of 8

In conclusion, for the reasons set forth above, the Applicant submits that all claims now pending are in condition for immediate allowance. Accordingly, notice to such effect is respectfully requested at the Examiner's earliest opportunity.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



Kevin R. Lyn  
Registration No. 42,818

**Customer No. 00826**  
**ALSTON & BIRD LLP**  
Bank of America Plaza  
101 South Tryon Street, Suite 4000  
Charlotte, NC 28280-4000  
Tel Raleigh Office (919) 862-2200  
Fax Raleigh Office (919) 862-2260

CERTIFICATION OF FACSIMILE TRANSMISSION	CERTIFICATE OF MAILING
<p>I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office at Fax No. 1-703-872-9310 on the date shown below.</p> <p><u>Tracey S. Wright</u> (Type or print name of person signing certification.)</p> <p><u>Tracey S. Wright</u> <u>12/19/02</u> Signature Date</p>	<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on December 19, 2002.</p> <p>_____</p>

RTA 2129444

In re: Anders Tommy Linden  
Appl. No.: 09/882,659  
Filed: June 15, 2001  
Page 8 of 8

**Version with Markings to Show Changes Made:**

18. (Amended) A dry end of a papermaking machine, the dry end comprising:  
a Yankee dryer for drying a paper web;  
a rotatably driven reel spool for winding the paper web creped from the Yankee dryer  
thereon, the reel spool being located downstream of and proximate to the dryer  
[and close-coupled thereto]; and  
a winding support belt stretched between at least a pair of spaced-apart guide rolls and  
supporting the reel spool and a paper roll wound thereon, the belt forming a nip  
with the paper roll.

22. (Amended) An apparatus for a dry end of a papermaking machine having a Yankee  
dryer for drying a paper web, the apparatus comprising:  
a rotatably driven reel spool for winding the paper web creped from the Yankee dryer  
thereon, the reel spool being located downstream of and proximate to the dryer;  
and  
a belt running in a loop about a plurality of guide rolls, a first of the guide rolls being  
positioned proximate the dryer and spaced upstream of a growing paper roll  
wound on the reel spool, a second of the guide rolls being positioned adjacent the  
paper roll such that a portion of the loop of the belt between the first and second  
guide rolls extends from a location proximate the dryer to the paper roll, said  
portion of the loop stabilizing the paper web as the paper web travels from the  
dryer to the paper roll.